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ABSTRACT

This report describes the implementation of the Individually Guided Education (IGE) program in the Armstrong School in Lynchburg, Virginia. In IGE, the graded self-contained classroom is replaced by the multiunit school so that individualized learning can occur. There has been much demand for similar kinds of changes in schools, but most previous programs have been unsuccessful. The IGE system was begun in the Armstrong School in the fall of 1973 with strong support from the principal and less enthusiastic support from the staff. The school's implementation was inadequate in several areas, including infrequent Instructional Improvement Committee meetings, unproductive unit meetings, failure to properly utilize the IGE planning model, lack of adequate inservice training, and lack of administrative understanding and leadership. These inadequacies were observed by the author and cited in a questionnaire administered to teachers. In the spring of 1975, the author was appointed principal of the school. To solve implementation problems, inservice training sessions for staff and parents were held. Results of a questionnaire given to teachers and parents indicated acceleration of implementation, improvement of staff relationships, increased staff and parent understanding of the project, and agreement with the findings of several other IGE studies. The principal's leadership was an important factor in implementation. (Author/JM)

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LEADERSHIP FOR CHANGE: A CASE STUDY OF POSITIVE CHANGE

Dr. Fred D. Gillispie, Jr.

EA 011 246

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

"I don't know whether if things change they will get better, but I do know that if things are to get better they must change."

– Georg Lichtenburg,
18th century German philosopher

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LEADERSHIP FOR CHANGE: A CASE STUDY OF POSITIVE CHANGE

CHAPTER I - THE INTRODUCTION

It has become increasingly popular to suggest the ineffectiveness of America's public schools. Vast amounts of literature has accumulated concerning shortcomings of the public schools. Many remedies have been proposed to set the schools right, and with them, vast amounts of educational research. This research has been compiled, annotated, summarized, and synthesized. Unfortunately, all this activity has seemed to have little effect on what goes on in the schools. As an old theme states, "The more things change, the more they remain the same." (37:1)

It should be clear that schools which still measure their success by the number of students who adapt, adjust, and conform, cannot be the answer for the children or this country. (28:1)

Children today should not be taught as we were taught. Though many parents and some teachers seem to think so, it was not right that all children, with varying abilities, be put into a room and taught the same things at the same time, competing against each other. Children should ask questions, move around, work in groups, learn from each other. They should be free to try things that they're not very good at and get some experience in these things. Teaching which inspires children to want to think and want to learn more is not easy, but it is worthwhile. (27: 6-8, 32)

In too many schools, knowledge is still conceived as coming down, through the teacher, who takes it down from the shelves where it is displayed and stored, and hands it out to students who presumably need only memory in order to receive it. This process is conceived by some as the way the student acquires knowledge. (15:3-4)

Millions of words have been devoted to humanizing and individualizing instruction, but few teachers have been able to adequately incorporate the concept into programs that function successfully. While total individualization is rare if not impossible, it represents a goal to which more educators should aspire. (29:133)

Instruction that is individualized must be designed by the teacher who has tested and diagnosed the student's abilities, weaknesses, learning style, interests, and degree of self-discipline. Such a prescription permits the student to proceed at his own pace and level, with materials and projects that motivate and involve him. The student is provided with alternative resources and encouraged to exercise choices in the selection of activities, self-assessment, self-instruction, and methodology. (11:51)

Such a program can only be provided by permitting sufficient variation in the school envoronment so that each child may select his own way of becoming involved with curriculum, life, learning, and people. (11:60)

Pupils should be permitted to work together in pairs and teams as well as alone. Building small-group interactions into the learning process prevents youngsters from becomming too isolated. By working together, students spark each other's ideas, help each other to learn, exchange points of view, and share the responsibility for learning, so that self-reliance does not become too burdensome. (11:151)

In bringing about such as environment, there is no substitute for a teacher who is sensitive to pupils as human beings, who can create excitement, and who understands the child's world. In these times of back-to-basics and other demands for change, it may be well to reemphasize the desirability for new ways of recognizing the needs of different children. Such recognition may require much more information about the child than is usually known. (31: 23-28)

Some have tried to individualize by simply turning the children loose to work at their own pace in their regular textbooks. This is a popular practice in the name of individualization. There are those who have replaced the "grade" signs above classroom doors with signs indicating level. Unfortunately, no magic occurs to make these classes non-graded or individualized.

Knowing what needs to be learned is one of the most important steps in planning an individualized program. Careful preassessment procedures are necessary to determine these needs. Continuous evaluation is then

required to monitor progress and to determine future direction. A system of management for the program which includes these aspects is perhaps the greatest challenge to schools. (6:50-53)

Education has been under siege from conservatives who never really wanted to accept universal education and from those on the political left who view education as a tool of capitalism.

New and effective voices are needed to harness the capacity of education as a progressive social force. (17:10-18)

Some of this criticism may be observed in the efforts of those who want to somehow go "back to basics." Such a yearning for a safe, clean, pure environment that never was, but which many people think they remember, may be misdirected. (19:11-13)

If we could somehow remove schools from the noneducational role of ranking, sorting, and labeling, which are none of schools' business, then possibly we could make the schools the pleasant, interesting places they should be for people to come to learn. (5:

For many, suggesting alternatives to the traditional view conjures up a vision of permissiveness and lack of formal structure, or even a "hippy-type" counter culture flavor. While this may be understandable,

it has caused a considerable problem. It is precisely those who may misunderstand who most need to be reached if alternatives are to be generated into genuine reform.

The demand for a return to the three Rs would establish more standardization. It is difficult to see how this would promote the values of human growth. There is, therefore, a sense of urgency in considering alternatives. One choice is a system of variety in which each child is provided an environment that best supports his or her learning style and personal development. The other choice is a system that establishes one right way, with learners competing for the right to be "winners" and with the loosers relegated to an underclass status. For many, the choice is clear. We should fully mobilize our energies toward humanization as an antidote to a retreat to standardization. (14:83-87)

Many research studies identify a single concept or variable and examine it to see if it responds to the examiner's expectations. This examination of singular dimensions of complex dynamics is almost self-contradictory. (37:4)

Some would have us believe that we are on a collision course with Doomsday. Perspectives can become distorted from the compulsion of the media to turn every bit of bad news into a full-blown crisis. These prophets of doom however, fail to appreciate the inherent ability of man to adjust and innovate. (38:93)

There is little question about the need for change in our schools. The reason change has not been more successful is not that what was attempted was of little usefulness, but an underestimation of the complexity of the school as a social system and the complexity of the change process itself. (37: Introduction)

Trying to bring about change in education under such diversity has been compaired to trying to move a cemetary. Others have described the process of school reform as great expectations followed by greater disillusionment. (18:81)

A common denominator for the varying degrees of failure or only partial success has been lukewarm response by school staffs, too rapid turnover of project leaders, and the fact that most reforms were tested in suburbs and applicability for other situations was minimized.

It would be misleading to exclude a number of reforms that have survived. Among them, schools have reinstituted minimum scholastic requirements; leading scholars have devised improved programs; funds were committed to bridge the gap between mainstream and the disadvantaged. Some limitations, on the other hand, may be attributed to inadequate funding, ineffective implementation, and insufficient time for long-term gains, rather than to any faults with the innovative concept itself. (18:83)

To assess the fate of two decades of innovation may create a sense of futility, relieved by only a few bright spots of limited success. Such a

review underscores the entriched power of the status quo. Yet, excessive gloom unduly obscures the significant fallout that remains after the pilot projects have been abandoned and forgotten. (18:125)

In instances where the process of reform through innovations has failed, the approach was often piecemeal and involved manipulating only part of the program rather than the total process, and neither teachers, students, nor parents were involved sufficiently in important decisions affecting the innovation. (4:4)

These concerns for change in our schools, and for the processes which effect change, leave us with two central questions: What changes should be made and how may such changes be brought about? (8:1) Answers to these questions are complicated by the diverse criticisms representing different political, pedagogical, and philosophical view points. Paul Goodman believed in the natural functioning of people. He wrote about the ways schools crush individuality, stifle creativity, and cripple the mind and the emotions. John Holt describes strategies which young people develop to cope with the highly competitive and judgmental moral system he sees imposed on them in the classroom. A.S. Neill described his environment where children could grow as healthy individuals. Jonotham Kozol describes situations teachers set up which guarantee failute. Herbert Kohl suggests that it is adults who fail children and not the children who fail. Other writers, such as Neil Postman, Charles Silberman, and Mario Fantini, offer gentle criticism of schools. Christopher Jencks suggests the futility of merely changing schools. He believes

change will come only by establishing political control over the economic institutions that shape our society. (24:158-162)

Many express their favor of change in education, but putting their words into practice often provides more than enough excuses to go around. One way of taking away some of those excuses may be in creating additional alternatives.

These alternatives should be a threat to no one. A spirit of coexistence and options, rather than the notion that finding a new way causes the old way to die, should be evident. A weakness of many strategies for change is a strong preoccupation with pre-planning, which may leave little energy for correcting mistakes. Often when plans are implemented, there is so much invested in the direction that the implementation takes that it is very difficult to change. To do so requires another planning session, and that is very difficult to accomplish. Therefore plans are all the more explicit to make sure the initial direction is right. This may be compaired with trying to reach the moon with a rocket sent entirely from the ground. If in-flight correction is added, it is much more possible to hit the target. (2:33-36)

The self-contained elementary classroom organization has not changed much since 1850. The development of a suitable, carefully designed and tested alternative to facilitate the adoption of practices conducive to more effective teaching and learning should be based on the belief that the educational process should focus attention on the individual learner

as a person with unique characteristics, capabilities, concerns, needs-dispositions, and motivations. This can be accomplished through an assessment of the level of achievement, learning style, and motivation of each student; setting specific instructional objectives for each student; planning and conducting instructional activities which are suitable for each student by varying the amount of direction provided by the teacher, the amount of time spent in interaction among students, and the amount of time spent by each student in different types and sizes of learning groups; and assesament of each student for attainment of objectives in order to set the next instructional objectives to be attained. (25:4)

Recently several programs have been developed which are intended to permit individual rather than group learning. Among these are Individually Prescribed Instruction (IPI), Program for Learning in Accordance with Needs (PLAN), Teaching Learning Units (TLUs), and Learning Activity Packages (LAPs). These programs have taken advantage of what is known about the inability of all children to progress at the same rate of speed. Opportunities are provided for students to proceed at different rates, but these sequenced programs are not designed to include student interaction, peer sharing, small-group modes, and independently designed learning contracts. (11:9)

None of these offers a satisfactory solution to how outside resources and stimulation will encourage and enable a school to try something different. A close association between some outside expert and a school might bring about change, but the usual long-range result, however, has often

been for the school to revert to its old ways after the expert leaves. For a strategy to be both feasible and effective, schools need help in helping themselves to realize that their success is due to their own efforts and abilities, not to outside expertise. (3:17-18)

An alternative which takes these considerations into account is IGE (Individually Guided Education.) IGE was developed by the Institute for Development of Educational Activities, Inc. (I/D/E/A). I/D/E/A was established by the Charles F. Kettering Foundation in 1965 and given the task of accelerating the pace of change in education. Dr. John I. Goodlad, head of I/D/E/A's Research Division, formed eighteen schools from eighteen Southern California districts into the League of Cooperating Schools to participate in the design and testing of a new strategy for educational improvement. (37:forward)

Also involved in the formation of IGE was a project called Maximizing Opportunities for Development and Experimentation in Learning in the Schools, which was begun at the Wisconsin Research and Development Center under the direction of Herbert J. Klausmeier. Four school districts started the first 13 nongraded Instructional and Research Units as replacements for age-graded classes in the second semester of the 1965-66 school year.

In 1969, the Wisconsin Research and Development Center and I/D/E/A signed an agreement whereby I/D/E/A was authorized to produce a more sophisticated set of inservice materials to prepare facilitators to establish multiunit schools. The Multiunit Elementary School concept was se-

lected by the United States Office of Education for nation-wide implementation during 1971-72 and 1972-73. The National Institute of Education funded an implementation effort during 1973-74. (25:7-9)

Individually Guided Education provides a framework in which the educational experience for every child takes into account what he already knows, how rapidly he learns, and how he goes about learning.

IGE is concerned with changing the organization for instruction and staffing patterns so that individualization can more rapidly occur. The age-graded, self-contained classroom is replaced by the multiunit school. By incorporating such practices as multiaged grouping, team teaching, and differentiated staffing, the multiunit school provides for instructional decision-making at appropriate levels for more open communication and for accountability.

The feasibility of the IGE system as an alternative form of schooling is indicated by its adoption record. By 1974-75, approximately 2,000 schools in 37 states had made the complex change to this organization. Many schools which wish to individualize find that IGE meets needs which they have already defined. (1:2-4) This growth has made IGE the most frequently adopted change model for elementary education in the United States. (23:1)

Findings and conclusions of a study by Kelly, Wood, and Jackel suggest that positive results are obtained by the implementation of

the IGE model. These include an increase in a climate which stresses intellectual endeavors, increased achievement, more respect for others, and increased interpersonal interaction. (23:55)

A previous study by this writer (16) examined some of the needs for change and described the implementation of the IGE change strategy in a specific school situation. The present study describes these concerns as applied to another school, with particular attention to those aspects of this second situation which differ from the first.

In order to describe this situation, the study is organized into four chapters and six appendices.

Chapter I - The Introduction - provides a background regarding demands for bringing about change in schools and addresses some of the difficulties in such an undertaking.

Chapter II - Basic Assumptions and Methodology - identifies the framework of research evidence within which change activities in this particular situation were implemented.

Chapter III - A Description of the Changes - provides specific exploration of strategies used in seeking answers to the following questions:

How did the school come to begin IGE implementation?

Why was it not particularly successful?

What could be done differently to improve the situation?

Were these different measures successful?

Does this staff's experience support others' research regarding IGE implementation?

Chapter IV - Summary, Conclusions, and Recommendations For Further Study.

Appendices - examples of questionaires and surveys used and schedules of activities.

As in the previous study, background sources are cited throughout. This effort, singularly and when considered along with other studies involving change processes, should provide direction for those engaged in bringing about improved efficiency and effectiveness in school operations.

CHAPTER II - BASIC ASSUMPTIONS AND METHODOLOGY

The previous study by this writer suggested that the success of the principal in bringing about change in a school is dependent on the interpersonal relationships perceived by those with whom he works and on the extent to which he involves them in planning, implementing, and evaluating the changes. (16:63-64) Also suggested was the desirability of testing these and other aspects of change processes under other circumstances. (16:66)

At the same time these suggestions were being made, other voices seemed to see a climate with much fear, suspicion, caution, and reaction. We read much about a "return to basics." There are those who would burn or otherwise eliminate certain books or "un-American" curriculum. Northern cities have become new symbols of bigotry. Fine arts are again being viewed in some quarters as frills which should be eliminated from tight school budgets. American education is responding to a variety of political, social, and economic pressures that may have little to do with what is right or best for children.

There is, though, a growing body of knowledge about what changes are needed and how to bring them about, that can and should guide school planning and decision-making. It would be a tragedy of uncalcuable dimension to ignore this knowledge and follow the cries of the uninformed. (33:297)

There is an increasing amount of knowledge about child development, perceptual and developmental psychology, learning theory, social science, and education. This knowledge provides possible implications for those interested and involved in educational change.

It should be remembered, though, that research in education does not actually "prove" anything. It can only be concluded that a number of studies with similar findings can increase our confidence about those findings.

Studies by Warner, et al, suggest that school design, by itself, does not alter social interactions between teachers and principal. Mills and Pennington noted increased feelings of professionalism and more positive attitudes among teachers in schools which philosophically and structurally were more open than traditional.

Overall differences in achievement, self-concept, attitude, and student personality were found to be small in studies by Burnham, Jeffreys, Laferge, McCallum, Townsend, and Warner. Some affective advantages were found by Anifant and Cropley. Heingartner noted greater identification with the group and increased self-esteem. Myers found that children in more open areas seek to and do achieve more autonomy from their teachers than do children in self-contained classrooms. They also expressed more concern for teacher fairness.

Beckley and Beals both found more positive attitudes toward school. Laforge found open design students more sensitive to the needs of others than in the comparison traditional classes.

The studies reported by Martin and Pavan do not find that open space organization promotes significant differences in learning and teaching outcomes. Innovative programs can exist in buildings originally intended for traditional classrooms. Changes in architecture do not in and of themselves make a great difference.

Generally, students in nongraded programs have achieved as well as or better than their peers in graded programs - usually better. Studies by Bowman, Brody, Chalfant, Gumpepper, Killough, Morris, Remacle, Ward, and Wilt support more positive achievement results.

Heterogenous grouping is credited by Junnell with improvements in self-concepts. Mycock and Samuels indicate improved attitudes toward school and school work. Mycock further found young or immature children experiencing less stress in mixed-age classrooms. Junnell found that mixed-age groups placed together for several years formed more positive attitudes and values than those found by children grouped by chronological age.

Engman's research revealed that team teaching has most often failed because of personality clashes, the inability of teachers to integrate their material, and a lack of planning time. Arikado and Musella found that teachers on leaderless teams tend to be more satisfied than teachers

on teams with formal leadership. Splaine concluded that students tend to prefer a team in which the leader is clearly indicated. Meiskin found teachers to be generally positive about teaming, due to the greater variety of activities that can go on at the same time and the atmosphere of creativity which can exist.

Bair and Woodward reviewed the research on team teaching and concluded that there were no significant differences in the academic achievement of team-taught children and children taught by individual teachers. The impact of teaming on the teachers was generally positive. Wilder's research showed that team-taught classes benefited from the talents and abilities of more than one teacher. Burchyett found no significant difference between the academic achievement of children in a nongraded, multi-age, team-taught school and the achievement of similar children in a self-contained classroom. Children in the experimental school did excell in creative thinking and general motivation, however.

McCallum, studying the problems of children in a team-taught class and a conventional class, found no differences in the types of problems children experienced. Bowering and Splaine concluded that students perceived team teaching as being more effective and that teachers were able to establish rapport in a team-teaching structure as readily as they could in a traditional appraoch.

It appears that innovations such as open space schools, nongradedness, vertical grouping, and team teaching do not, either alone or in combination,

result in detrimental effects on cognitive or affective outcomes. The research cited indicates that such innovations, when properly implemented, may be a step toward educational improvement, and are valid alternatives to the traditional modes of teaching and school organization. (26:310-315)

A study by the Center for Social Organization of Schools at Johns Hopkins University - the most extensive study made yet comparing open and traditional schools - indicated the effects produced by the type of organization are negligible compared to such non-school factors as economics or within-school factors such as an inspiring teacher. The study shows mixed effects on achievement. Essentially achievement under open programs is comparable to achievement under traditional ones. This should reassure parents, school board members, and teachers. Whether a school was open depended, the study found, on its programs rather than on its architecture. In every grade studied, students in open schools had higher average scores on self-reliance and greater satisfaction with their school experiences. (21:12)

Studies show that the teacher's behavior controls that of the children. A teacher can learn to be effective in classroom management simply by learning the appropriate set of behaviors (12:64)

In a study of the relationships of the principal's leadership behavior to the effectiveness of instructional operations in IGE schools, Gramenz found that staff perceptions of the principal's support and participation

was positively and significantly related to effectiveness. (25:62)

Getzels and Guba suggest the importance of the principal's awareness of staff perceptions of his leadership style. Such awareness largely determines how effective he will be in dealing with them. (37:19-20)

Teachers in schools with high operational efficiency perceive the ideal principal as being more tolerant of uncertainty than do teachers in schools with lower operational efficiency, who feel the ideal principal should emphasize production. This may be an indication of their need for support and reinforcement and an admission of a lack of self-direction. (37:25-26)

While the principal should inspire the staff to move toward planned change, meaningful and lasting change will occur only when teachers have had a significant part in the decision-making processes involved in planning and implementing the changes. Change which comes from administrative edict will probably be neither effective nor lasting. (28:14)

When change is decreed in order to jump on some currently popular bandwagon, it is apt to be carried out poorly and soon abandoned. (10:18) Culver and Hoban indicate that when teachers are involved, they respond with higher morale. The principal, they suggest, must create an atmosphere in the school conducive to shared decision-making and problem-solving. (8:4-5)

Research by Goodridge concludes that the principal's influence is particularly instrumental in the awareness and adoption phases of planned change. (25:233) Increasing the frequency and quality of interpersonal contacts can enhance the success of innovation by aiding in the formation of a support group advocating the change. (20:338-340)

Carlson's research indicates the social interaction and principal's personal influence to be key variables in successful change. (25:234) Because the principal is the designated leader of his staff, he can do a great deal to either encourage or discourage progress. (37:40) In addition to supporting and facilitating an environment conducive to change, the principal must understand the dynamics of change processes. (25:230)

Howes found that the presentation of adequate information about the advocated change was essential if the principal was to secure staff acceptance of the change. (25:134)

Pelhgrin, Klausmeir, and Ironside, as well as the writer's experience and observation, each have found considerable variance among units in following the IGE model. (13:113) Evers has found no particular relationship between the effectiveness of a unit and number of unit teachers or number of hours spent in unit meetings. She did find greater participation in staff development activities by teachers in more effective units. (13:122) Herrick found multiunit schools less stratified and teachers more highly motivated than nonmultiunit schools. (25:157) Schools in which the unit structure functions appropriately report considerable gain in effectiveness and efficiency and in the morale of teachers, pupils, and parents. (25:254)

Strand, in an examination of the relationship between plant characteristics and successful change, found that sufficient information leading to staff commitment to the change was essential to successful change regardless of the design of the school plant. (25:222)

Supported by such findings as those cited above, the assumptions of the writer's previous study seem equally valid for the current one:

1. Leadership style can be an important factor in initiating, encouraging, and implementing change.
2. Characteristics can be identified which are desirable for the leader of change to possess.
3. Decisions can be implemented more effectively when those responsible for implementing them also have responsibility for making those decisions.
4. Thorough study and preparation is desirable for reducing resistance and building support for change.
5. Teachers' attitudes toward change affect its successful accomplishment.
6. Pupils can be led to accept increasing responsibility for their own direction.
7. Parent support can be developed if parents are informed and involved. (16:13-14)

In order to accumulate data to re-test and further validate these assumptions, the methods utilized included:

1. The writer's participation as an observer of the processes described.
2. Informal interviews with teachers.
3. Impressions of outside observers, including school system central office personnel, visitors, and observers from other schools within the system, and observers from outside this school system.
4. Surveys of teacher opinion regarding the effectiveness of various aspects of the change process used.
5. Schedules of in-service activities.
6. Schedules of parent information activities.
7. Surveys of parent opinion regarding various facets of change processes utilized.

CHAPTER III - A DESCRIPTION OF THE CHANGES

Like most schools in the Lynchburg, Virginia Public School system, Armstrong School has undergone significant changes in the last several years in its organizational and attendance structures. The school is in a neighborhood which has been primarily black. In order to achieve a racial balance, the school is paired with another school, the two serving an attendance area which includes a broad socio-economic range. Approximately two-thirds of the student body is white and many of these pupils are bussed to the school. The staff reflects a similar racial ration.

During the 1972-73 school year, the faculty visited other schools in the system which were utilizing the IGE organizational model. Several presentations were made to the staff by the system's facilitator. Already the school was utilizing team teaching, and the principal saw IGE as a possible means of better accomplishing what he hoped the school could do.

IGE makes a deliberate attempt to retain the best practices of the past while substituting new ones where they are needed. The primary thrust in attempting to improve American education over the past several years has been individualized instruction. Most teachers have always recognized that every child is an individual. But, even with this recognition, students for the most part have been forced to fit into

the existing system. IGE tries to correct this by encouraging the development of instructional programs for each student so that his clearly-stated objectives may be attained. This calls for planning instructional programs which allow each student to progress at his own rate, providing instructional materials which accommodate individual learning styles, organizing modes of instruction to suit each child's learning style, and matching teachers and students so that each student has the help of the teacher who best suits him for each specific learning task.

IGE encourages the adaptation of some of the most talked about innovations of the past two decades - team teaching, differentiated staffing, inquiry-directed learning, multi-age grouping, peer instruction, continuous progress learning, and others.

The self-contained classroom is replaced with an instructional unit composed of three to five teachers, additional supportive staff, and 80 to 100 or more children. Every student works independently or is grouped and regrouped with others regardless of his age or years in school, according to his progress toward or interest in attaining his instructional objectives. Every student advances as quickly or as slowly as he must, depending only on his individual ability. Groups of teachers assess pupil progress, devise instructional strategies, and divide teaching assignments according to the abilities and interests of each member of the team. Outstanding teachers serve as unit leaders, to direct the education of children and provide leadership and assistance to other teachers. (22:25-27)

Basic changes are made in the roles of the principal and teachers. The unit leader is a member of the Instructional Improvement Committee (IIC), leader of a unit, and a teacher in the unit. As a member of the IIC, the unit leader contributes to planning the entire program of the school primarily by defining the program of the unit in relation to that of other units in the school. As the leader of the unit, the unit leader coordinates the planning of instructional activities in the unit, allocation of materials and resources, and fosters and maintains effective working relationships within the unit and between the unit staff and others. As a teacher, the unit leader spends from 50 to 80 percent of the time interacting directly with students.

The role of the staff teacher is altered considerably by the multi-unit organization. The teacher participates in unit planning sessions, is involved with a large number of the children in the unit, and performs more professional and less routine work. The collaborative planning, instruction, and evaluation called for in IGE demand specialization of tasks according to the capabilities and interests of each staff member.

In the IGE school, the role of the principal is changed substantially in that the principal assumes greater and more direct leadership responsibility for the improvement of instruction. The principal organizes and leads the IIC which serves as the vehicle for open communication and systematic planning. The principal selects, assigns, and orients the staff members to their differentiated roles and encourages each person to par-

ticipate in a meaningful program of professional growth and development. The principal's interpersonal relationships and behavior influence the organizational climate and morale of the entire school. The principal initiates and fosters organizational relationships and resources to provide effective programs of home-school-community relations, preservice and inservice training, and continuing research and development to improve instructional programming for the individual student. (25:12-13)

As noted previously, the effectiveness of IGE implementation frequently varies from unit to unit and school to school. The schools visited by the Armstrong faculty were indicative of this variation. Teachers felt that if IGE could be what they observed in some schools, they could see real advantage in utilizing the process. Particularly did they feel this was so in Dearington School, where the present Armstrong principal was at the time, and which is the subject of his previous study. If, however, it had to be what was perceived as chaotic and unorganized, as in some other schools, then they were not anxious to implement it. This writer, in talking with them at the time, attempted to convince them that it could be about what ever they determined it should be.

With somewhat mixed commitment, the Armstrong faculty began implementing the IGE unit structure in the fall of 1973. Only 50% of the faculty indicated they felt they had a voice in the decision to become an IGE school. (See item 1 of Appendix A.) During the 1973-74 and 74-75 school years, the IGE facilitator attempted to work with the principal and staff in several areas he felt the school's implementation was inadequate. Among these were: infrequent IIC

meetings, infrequent and unproductive unit meetings, failure to properly utilize the IGE planning model, lack of adequate in-service activity to encourage and reinforce proper implementation procedures, and lack of administrative understanding and leadership regarding IGE. These observations are borne out by the Implementation Questionaire results in Table 1, which indicate the degree of implementation.

TABLE 1

DEGREE OF IMPLEMENTATION

	1973-74	1974-75
Adoption and Implementation	60%	64%
School decisions	46%	49%
Unit organization	70%	77%
Unit planning and Improvement	53%	59%
Relationships	47%	63%
The Learning Program	64%	70%
Student Responsibilities	37%	37%
	53%	60%

The school division's administration realized that there were problems in the way Armstrong School was functioning. While the causes of the problems were not entirely clear, it was decided that a change in administrators was needed. In the spring of 1975, the writer was appointed principal of the school. In a letter to the faculty, the writer identified priorities for the coming year as he understood the desires and concerns of the superintendent and central office staff for the school:

> "...an effective and functioning IIC, good unit planning, warm and pleasant interpersonal relationships within and between units and individuals."

It was realized that there was no simple, easy, or quick way of bringing about improvement. While the school should be humane and should provide exciting and worthwhile experiences, none of these would happen if change was only superficial and did not have staff and community support. (36:305)

Ultimately the success or failure of any organizational pattern is dependent upon the amount of communication and the nature of the interaction within the teaching staff. Although the physical facilities occasionally play a role, they seldom determine the eventual success of the program. Instead, positive outcomes are related to the extent to which teachers share their ideas, philosophies, and percentions about children and their commonly-achieved evaluation guidelines.

When the primary interactions within the teams are related to the mechanics of daily instruction such as time allowance, subject matter assignments within the unit, and scheduling of space, each of the teachers continues to function as an instructional island and teamness is minimal or lost. Teams which reflect flexibility in decision-making processes see their responsibilities to the pupils in a different light. Their team planning sessions find them working out problems in terms of the unique requirements of individual pupils as well as the needs of the total unit. The result is increased individualization, varying size groups in keeping with pupils' needs, greater utilization of teacher competencies, and a program in which schedules and plant serve the teams and the pupils. (32:84-86)

Though several references cited suggest that the physical facilities do not determine the success or failure of an innovation, the Armstrong staff felt that opening traditionally self-contained classrooms by removing walls could have a positive effect of removing some psychological barriers to a spirit of openness between teachers and facilitate movement of children. Over a period of several years, progress was realized from separate, self-contained classrooms, to door-sizxd openings, to half a wall removed, until eventually total walls were removed between each pair of classrooms in the building. The staff believes the expected results have been realized. Data cited in a later section of this chapter, regarding improved staff interrelationships, would seem to support this belief.

Different people held differing ideas regarding a desirable way to proceed. To some each child should be doing his own thing. Some thought instruction should be on a one-to-one basis. Others felt each child should go through worksheets or packets at his own rate. Some believed children should be grouped according to their needs. The school's philosophy was reviewed and revised. It was the consensus of belief that the school should provide an opportunity for each child to work at a level where he could find interest and success. The staff would provide respect for and recognition of the child as an individual . The school philosophy is stated in Appendix B.

The school's philosophy fit the IGE philosophy and the teaching approach was similar to the learning cycle proposed by IGE. While IGE provides a blueprint to follow, there is flexibility within the blueprint.

There is no set way of doing things. Changes can be made to meet the school's individual needs. It's developers describe their program as a "proven method of creating a relaxed personalized environment that is highly conducive to learning - an environment that turns children on, not off." (28:164-166)

Parents often tend to remember and romanticize the good and to forget the bad about the schools they attended. They may think, "What was good enough for me is good enough for my child." Thus when a change is proposed in their child's school, not all parents will be overjoyed. Preparing parents for change is better than repairing relations after the change has come about. (28:25-26)

Teachers were continuously reminded that those who strive to create exciting, humanized classrooms must beware of emphasizing only the freedom and self-direction. Teachers must help children develop skills of self-discipline through involvement and interaction. Opening the classroom is not license for adult withdrawal and detatchment. Sharing and purposeful direction are essential. (7:33)

To deal with the problems as identified by others and quickly apparent to the writer, an intensive in-service effort was developed and implemented. Components of this effort may be seen in Appendix C.

In partial jest, some staff members described the situation as one in which the school was in its third year of first-year IGE implementation.

That some aspects of implementation had never quite gotten off the ground was assumed in thein-service activities, which included visitations to other schools, films and film strips, printed materials, and other activities planned as they would have been if the school, staff, pupils, and parents had had no previous IGE experience.

Whereas 32% of the staff did not feel they had sufficient information about IGE implementation when they originally began it, 100% felt they did after this in-service emphasis. (See items 1 and 2 of Appendix D.) The staff also indicated they sensed a considerable increase in parent awareness of what the school was attempting. In 1973-74, 30% of the staff felt that most of the parents were aware. By 1975-76, this had increased to 80%. (See item 3 of Appendix A.)

Parents themselves supported this feeling. In 1973-74, 75% of those who responded to a questionaire indicated they understood what the school was trying to accomplish. Two years later, 93% responded "yes" to this question. (See item 1 of Appendix E.)

There also seemed to be an obvious increase in parent support for what was happening. In 1973-74, 81% of those who responded indicated they felt the school's activities were appropriate for their child. In 1975-76, 97% responded positively to this question. (See item 2 of Appendix E.)

Even given these concrete evidences of improvements, there persisted during 1975-76 a feeling that something was still not as it should be.

Observations by the principal, league facilitator, other central office personnel, and peer observation of teachers tended to indicate personnel problems regarding trust, confidence, and support within the staff for one another.

Parents, too, had, while voicing overwhelming approval generally, indicated both in conversations with teachers and the principal and in comments on the questionaire that all was not well. One written comment was indicative of a feeling frequently expressed. "The classroom is chaotic and confusing, team teaching is poorly utilized."

Teacher responses on questionaires also supported this concern. Table 2 indicates the improvement in the two years of the present intensive effort to deal with the situation as compaired with the two previous years.

TABLE 2

ARMSTRONG TEACHERS RESPONSES REGARDING UNIT RELATIONSHIPS

	73-4	74-5	75-6	76-7
Teachers usually respond to one another's needs	70%	43%	80%	86%
Teachers usually trust one another's motives, ability	50%	43%	80%	72%
Teachers usually have open communications	50%	71%	90%	86%

Another indication of improved staff relationships may be seen in that in 1973-74, 30% of the staff indicated that compatibility had been well achieved and in 1976-77, 72% so indicated. (See item 7 of Appendix A.)

Unit attitude toward IGE increased from 10% feeling it had been well achieved in 1973-74 to 72% in 1976-77.

Responses to other questions also indicated improvement over the period being considered. There was an increase in the number of teachers who indicated that most of their students were engaged in activities based on specific learning objectives. In 1973-74, 30% indicated that all of their students were so engaged. In 1975-76, 80% indicated this. The increase would seem to be an indication of more extensive planning following the IGE model. (See item 8 of Appendix A.)

Table 3 provides an indication of the improvement in school organization which occurred. (See item 9 of Appendix A.)

TABLE 3

ARMSTRONG TEACHERS RESPONSES REGARDING SCHOOL-WIDE ORGANIZATIONAL OPERATION

	73-4	74-5	75-6
School wide policies are usually formulated by the IIC	20%	57%	70%
Problems which involve two or more units are usually resolved by the IIC	30%	14%	70%
The IIC coordinates the in-service program for the school	20%	57%	70%

It was felt that it would be interesting to compare Armstrong teachers' opinions with the results of some of the studies of IGE implementation cited previously. Their observations, based on their experiences, supported the studies' results in every instance cited, to the extent indicated in Table 4.

TABLE 4

A COMPARISON OF ARMSTRONG TEACHERS' OPINIONS WITH CONCLUSIONS OF SEVERAL IGE STUDIES

	SA	A	D	SD
Attitudes, ingenuity, and resoursefulness of staff are important to successful IGE implementation irrespective of the design of the building	76%	24%		
The principal's support is related to the effectiveness of IGE	76%	24%		
The unit is a powerful means for bringing human and material resources to bear upon improvement in organizational effectiveness, individual efficiency, and group morale	36%	64%		
Staff interaction is a key variable	60%	40%		
As IGE is implemented successfully, the staff is less stratified and more highly motivated	60%	40%		
Successfully implementing IGE accomplishes what the IGE model claims to do	11%	76%	11%	
As IGE is successfully implemented, there is an increasing openness of the climate in the school and an increase in developmental activities	40%	60%		
IGE helps teachers do a better job of teaching	36%	40%	24%	
Teachers in a successful IGE unit feel a heightened sense of power and enthusiasm about the potentialities of participation in decision-making	44%	44%	12%	
Pupils in a successful IGE school achieve better, have better attitudes about school and about themselves and fellow students than do pupils in traditional schools	22%	45%	33%	
IGE in-service materials have been good to excellent	12%	88%		

One teacher's comments are probably indicative of the feeling of some others. She wrote, "I think teachers can do a good job of teaching regardless of kind of school and same for students." While it is probably true that they can, the evidence remains that most teachers involved in IGE feel it helps them and their students do a better job of those things they seek to accomplish.

CHAPTER IV - SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER STUDY

In some schools today there seems to be a new degree of common sense about the nature of children and how they learn. Some learning theorists are realizing that the child is neither a product of the Devil, who needs constantly to be subdued by discipline if he is going to learn, nor is he a flower-child who will burst into bloom if we do not force his growth. Of course he is neither one nor the other, but a combination of some of each. He needs neither the constant threat of the rod nor complete freedom to always do his own thing. He does need skillful and imaginative adult guidance. That, after all, may be what teaching is all about.

The present interest in individualization seems to draw upon an awareness of our uniqueness as persons, but in practice instruction is often geared to individual differences only along the one dimension of time needed to attain mastery. When the same old stuff simply gets broken into a large number of assignments, instead of the tyranny of the teacher, we have the tyranny of the ditto machine. Leaping from the blackboard to the ditto sheet is not, by itself, a great movement. (35:481-482)

Most change models have change brought about by instituting prescribed steps: selection of goals, implementation of these goals, and assessment. While this may be part of the process, there is more to change than these mechanical steps. School staffs pass through stages of dialogue, experimentation, and questioning the value of the innovation before they are ready to establish new goals for change. To succeed, changes must be supported by those most intimately involved. (8:5-6)

To many, the system of IGE can be pointed to with pride as an effective example of building a bridge between theory and practice. (25:261) One school's experience with IGE has been described in this study. Background resource information has been used extensively throughout to support the assumptions advanced. Questions raised in Chapter II have been addressed in Chapter III.

Original implementation efforts were listed and problems as perceived by various persons involved were identified. Evaluation data from teachers and parents was used to support opinions stated.

Data in Table I indicates a 7% increase in the degree of implementation from 1973-74 to 1974-75. Of particular interest is a 16% increase in the area of relationships, which was one of the major problem areas identified as needing improvement.

That staff information about IGE improved can be concluded from data reported wherein 32% of the staff did not feel they had sufficient information to adequately implement IGE when they began, but 100% now feel they have sufficient information.

Parent awareness as perceived by the staff increased from 30 to 80%. Parents themselves reported increased understanding to 93% from 75% and approval of what was happening from 81% to 97%.

Table 4 provides data which indicates staff agreement with the findings of numerous other studies regarding IGE implementation.

From this data, it seems appropriate to reaffirm the importance of adequate knowledge and understanding of the proposed change to the successful implementation of that change. Planned in-service and parent information activities appear to result in increased support for the change.

The importance of the principal's leadership in initiating these activities should not be minimized. The principal who attempts to make changes in his school is called a change agent; however, he may be called other things, too, if he is not careful.

The results of most change efforts show that the chances of successful and significant change are best if techniques of planned change are used to initiate, regulate, and monitor the change process. (30:VII)

If change is to proceed in an orderly fashion toward actually accomplishing some kind of difference, it must be guided by a person who not only has foresight but also a perspective that permits change to be viewed not as static, but as a dynamic and evolving thing. (30:1)

A school should be a healthy and satisfying place to work for its staff as well as for its students. Being a teacher or principal can be lonely work, ringed by fears of the unkhown that might result from changes. (3:195) While many of the innovations in education are good, change for the sake of change isn't the answer. According to the Armstrong School's philosophy, the staff believes in teaching the individual child. The staff decided that Individually Guided Education best fit that philosophy and existing organizational pattern. (28:6-7)

The success of IGE may be that it is not so highly organized that it sets up all the steps for teachers and students, but that it is an umbrella structure that provides a format for trying out all kinds of teaching methods, techniques, and strategies, with one idea in mind - giving each child the opportunity to learn with the materials most suited to him and in the situation most suitable to his style of learning. (22:28)

That the principal should take responsibility for the leadership of his school may seem to be an obvious assumption, and yet, as Novotney points out, the true leader is a rare commodity in our schools. Out of an ignorance of the nature and the functions of leadership and a preoccupation with the management and maintainance of the schools, principals are expected to be administrators rather than leaders. (8:4)

Dale feels schools have been more concerned with the minds of students than with their hearts, more concerned with their intellect than with their emotions. Schools have emphasized what students know but underemphasized a concern for what they deeply care about, their attitude toward life, their zest for living. (9:5)

More attention to students' feelings and developing pupil responsibility for self-direction and self-evaluation seem to be areas about which more understanding is needed. It also seems apparent to this writer, from his experiences in two different IGE schools, that the position of unit leader is one which has a greater importance than is currently recognized. Further study of the role, qualifications, and influence of the unit leader could be quite useful

in improving the organizational efficiency and operational success of the school.

Although other factors have been identified as contributing factors to successful school operation, evidence persists regarding the over-riding importance of the principal. Arlene Silberman has described this role,

> "A school is as good or as bad, as creative or as sterile, as sensitive or as callous, as trusting or as suspicious, as flexible or as rigid, as free or as inhibited, as encouraging or as threatening as the person who heads it up.
>
> Outstanding principals stand for the unshakable belief that every child can learn, that teachers and principals must be life-long learners, that people must always come before paper work, and that school must be an encouraging, supportive place where people feel free to take risks, knowing they won't be ridiculed if they are wrong and that they will be respected for trying. Without this kind of atmosphere, all else fails. With it, everything is possible." (34:50-54)

APPENDIX A

SELECTED ITEMS FROM I/D/E/A-IGE IMPLEMENTATION QUESTIONAIRES

1. Did your teaching staff have a voice in the decision to become an IGE school?
   _____Yes, I feel that the recommendations of the staff were heard.
   _____Our staff did not participate in the decision to become an IGE school.
   _____I don't know.

2. Which of the following describe your school's decision to become involved in IGE?
   _____The staff developed "We Agree" statements that represented their educational goals.
   _____The staff had enough information about IGE to make a knowledgeable commitment to the program.
   _____I support the decision to participate in IGE.
   _____The IGE outcomes are consistent with the goals of the staff.

3. What percent of the parents would you characterize by each of the following statements?
   _____81-100% are aware of the IGE program.

4. Mark the responses that best describe relationships in your unit.
   _____teachers respond to one another's needs
   _____teachers trust one another's motives and abilities
   _____teachers have open communications

5. _____students and teachers respond to one another's needs
   _____students and teachers trust one another's motives and abilities
   _____students and teachers have open communications

6. _____students respond to one another's needs
   _____students trust one another's motives and abilities
   _____students have open communications

7. Do the teachers in your unit represent a cross section of your total staff regarding the following characteristics?

	well achieved	moderately achieved	poorly achieved
subject areas	_____	_____	_____
attitude toward IGE	_____	_____	_____
experience	_____	_____	_____
teaching style	_____	_____	_____

8. During a typical period, how many of your students do activities which are based upon specified learning objectives?
   none_____ few_____ some_____ most_____ all_____

9. Which of the following characterize your PIC operations?

	usually	somewhat	not yet
School-wide policies are formulated by PIC	_____	_____	_____
Problems which involve two or more learning communities are resolved by the PIC	_____	_____	_____
Does the PIC coordinate the in-service program for your school?	_____	_____	_____

APPENDIX B

ARMSTRONG SCHOOL PHILOSOPHY

We believe that every child entrusted to our care is a unique personality, worthy of having his potentialities developed to the fullest extent. All children have individual differences and learning takes place in a unique way. All phases of the instructional program should meet the basic needs of pupils.

Our children need:

1. to feel loved and experience a sense of belonging,
2. to develop a positive self-concept leading to respect for themselves and others,
3. to develop positive academic and social skills,
4. to become excited about learning as a result of experiencing success,
5. to become an active part of many experiences - basic as well as enriching,
6. to be given opportunities in self-expression in order to acquire a sense of personal worth and dignity,
7. to develop mature self-control and independence,
8. to develop an awareness of opportunities offered them and to realize with every right there is demand for equal responsibility.

Based on these beliefs, the objectives of Armstrong School are:

1. to show that learning is of prime importance through enthusiasm, example, and guidance,
2. to develop a constructive, happy and relaxed atmosphere essential for learning,
3. to further develop our program of individualized instruction,
4. to motivate children to develop proper study habits leading to mastery of skills and operations,
5. to use a variety of equipment and materials for optimum involvement of all their senses in active learning,
6. to develop for each child well-planned and appropriate learning experiences,
7. to develop and reinforce patterns that are meaningful toward acceptable behavior for each child,
8. to totally involve members of the staff in planning the program of instruction, utilizing individual strengths for best instructional procedures.

APPENDIX C

ARMSTRONG SCHOOL IN-SERVICE ACTIVITIES 1975-76

August 22 - IGE film: "Think Kids"
August 22 - public relations filmstrip: "A School Is People"
August 28 - display of IGE materials, slide presentation for parents
September 10- discussion: use of IGE implementation guide
September 11- discussion led by system volunteer coordinator:"Public Relations Aspects of Volunteer Aide Program"
October 1 - discussion led by system IGE facilitator:"Community Relations"
October 15 - IGE filmstrips: "IGE Planning and Management"
October 22 - filmstrip: Parent conferences
October 22 - IGE film: "Unit Meeting"
October 24 - Parent Clue-In Conference: question and answer session and filmstrip: "Organized For Learning"
November 12 - IIC review of IGE outcome accomplishment
November 12, 14, 17 - staff visitation to other IGE schools
November 19 - discussion: Teacher Effectiveness Training
Reality Therapy
December 2 - IGE presentation by principal to state Elementary Principals' Conference
December 16 - staff visitations
January 21-22-workshop led by system IGE facilitator on IGE Planning Process
January 24 - monitoring of unit by visiting unit leader/observer
February 11 - IGE booklet distributed to pupils
February 26, 27 - two staff members attend state IGE conference
March 31 - IIC evaluation of unit accomplishment of IGE outcomes
April 7 - evaluation of school philosophy
April 14 - IGE implementation evaluation conference: principal and Billy Reaves from I/D/E/A
April 29 - public relations filmstrip: "Your Public Is Listening"
June 2 - IIC discussion of results of parent questionaire
June 9 - IIC evaluation of school objectives and of IIC operations

APPENDIX D

SELECTED ITEMS FROM ARMSTRONG SCHOOL TEACHER QUESTIONAIRES

1. Did you have sufficient information when you began IGE? Yes_____ No_____
2. Do you now have sufficient information regarding IGE implementation? Yes_____ No_____

APPENDIX E

SELECTED ITEMS FROM ARMSTRONG SCHOOL PARENT QUESTIONAIRES

1. Do you feel you understand the school's philosophy; what the school is trying to accomplish? Yes_____ No_____
2. Do you feel what the school tries to do has been appropriate for your child? Yes_____ No_____
3. Do you feel you have been adequately informed of the school's philosophy and program and your child's progress? Yes_____ No_____

APPENDIX F

SELECTED ITEMS FROM A QUESTIONAIRE COMPARING ARMSTRONG TEACHERS' EXPERIENCES WITH CONCLUSIONS OF IGE STUDIES

Please rate your experiences with these conclusions from several studies involving IGE. Use the following scale: SA=strongly agree A=agree D=disagree SD=strongly disagree

Very important to successfully implementing IGE is having sufficient information.	SA	A	S	SD
Attitudes, ingenuity, and resourcefulness of staff are important to successful IGE implementation irrespective of the design of the building.	SA	A	D	SD
The principal's support is related to the effectiveness of IGE	SA	A	D	SD
The unit is a powerful means for bringing human and material resources to bear upon improvement in organizational effectiveness, individual efficiency, and group morale.	SA	A	D	SD
Staff interaction is a key variable.	SA	A	D	SD
As IGE is implemented successfully, the staff is less stratified and more highly motivated.	SA	A	D	SD
Successfully implementing IGE accomplishes what the IGE model claims to do.	SA	A	D	SD
As IGE is successfully implemented, there is an increasing openness of the climate in the school and an increase in developmental activities.	SA	A	D	SD
IGE helps teachers do a better job of teaching.	SA	A	D	SD
Teachers in a successful IGE unit feel a heightened sense of power and enthusiasm about the potentialities of participation in decision-making.	SA	A	D	SD
Pupils in a successful IGE school achieve better, have better attitudes about school and about themselves and fellow students than do pupils in traditional schools.	SA	A	D	SD
IGE in-service materials have been good to excellent.	SA	A	D	SD

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